

FLATHEAD COUNTY PLANNING AND ZONING OFFICE
MAJOR IMPACT LAKE AND LAKESHORE CONSTRUCTION PERMIT (#FLP-14-77)
LANE ROSS
NOVEMBER 12, 2014

A report regarding a request by Lane Ross for an after-the-fact lakeshore construction permit to bring into compliance a previously completed mass mechanized aquatic weed cutting project and the stock piling of the cut weeds which took place on three private properties and extended out into public water located on Little Bitterroot Lake. The mechanized cutting of aquatic weeds on Little Bitterroot Lake and the stockpiling of weeds within the Lakeshore Protection Zone (LPZ) have been determined by the Planning Director to create a significant impact requiring Planning Board review and recommendation to the Flathead County Commissioners, per Section 3.2(C)(b) of the Flathead County Lake and Lakeshore Protection Regulations.

I. APPLICATION REVIEW UPDATES

A. Planning Board

II. GENERAL INFORMATION

A. Application Personnel

i. Applicant

Lane Ross
Aquatic Weed Abatement of Montana
315 Meadow Hills Drive
Kalispell, MT 59901
(406) 871-3718

B. Property Location

The three subject properties are located on Little Bitterroot Lake. The property addresses are 795 Lodgepole Dr., 815 Lodgepole Dr. and 805 Lodgepole Marion, MT 59925 (see Figure 1 below). The properties can legally be described as Lot 30 of Blue Grouse Subdivision, Tract 2E and Tract 2EA all located in Section 06, Township 27 North, Range 24 West, P.M.M., Flathead County, Montana.

Figure 1: Subject properties (outlined in red)



Figure 2: Area of weed removal (outlined in red)



C. Summary of Request

This application is for a Lake and Lakeshore Construction Permit under the Flathead County Lake and Lakeshore Protection Regulations (FCLR), to bring into compliance the mechanized cutting of aquatic weeds on Little Bitterroot Lake and the stockpiling of weeds within the Lakeshore Protection Zone (LPZ) located on three private properties and extending out into public water. On July 3, 2014 our office received multiple phone calls questioning whether or not we were aware of a large orange watercraft which appeared to be “mowing weeds” in Little Bitterroot Lake. The Flathead County Planning and Zoning Office’s code compliance officer, George Ferris, drove out to location the afternoon of July 3, 2014 in response to the calls earlier that day and witnessed the “weed mower” removing aquatic vegetation in the lake in front of 815 Lodgepole Dr., Mr. Ferris approached the property owner, Mrs. Nilsson, who informed Mr. Ferris that she had hired the operator of the “weed mower” to mechanically cut vegetation in the lake in front of her property and was unaware if a permit was required. The watercraft operator, Lane Ross, came to shore and inquired if there was a problem with his activity. Mr. Ross informed Mr. Ferris that he had cut the weeds in front of the other two adjacent properties to Mrs. Nilsson’s property and had stockpiled a portion of those weeds within the Lakeshore Protection on one of those properties. Mr. Ferris informed him that a permit for aquatic weed cutting in the waters of the lake may be required. Mr. Ferris filed a formal complaint against Mr. Ross for the mass cutting and stockpiling of aquatic vegetation within the public waters of Little Bitterroot Lake. MCA 70-16-201 states that unless granted otherwise that lands lakeward of low water are public property, which would make the vegetation attached to the land lakeward of low water public property.

Figure 3: Photo of Mechanized Aquatic Vegetation Cutting Machine



In the following days the planning staff contacted multiple federal and state agencies (United States Fish and Wildlife, United States Army Corps of Engineers, Montana Fish Wildlife and Parks, Department of Natural Resource and Conservation, the Conservation District and Flathead County Weed Control Department) to inquire if they regulate the harvesting of aquatic vegetation within Little Bitterroot Lake. It was found that these agencies do not have specific jurisdiction over this type of activity within Little Bitterroot Lake, and the Flathead County Lake and Lakeshore Protection Regulations (FCLR) were adopted under 75-7-207 M.C.A to fill the void in jurisdictions in particular cases such as this one, and that our office was the qualified agency charged with regulating this particular activity. It was then determined by the Planning Director under Section 3.3 of the FCLR that this project may have a significant impact on the lake, lakebed, or lakeshore and required an after-the-fact lakeshore construction permit that required both agency referral and recommendations from the Flathead County Planning Board before going in front of the Commissioners for final decision.

On July 8, 2014 the code compliance officer, George Ferris, returned to Little Bitterroot Lake to make contact with Mr. Ross and to inform him that he must stop work immediately and would be required to apply for an after-the-fact lakeshore construction permit in order to bring into compliance the work that had previously been done on the lake. Mr. Ross was not present but a Stop Work Order was posted at the location off of Pleasant Valley Road where his watercraft was moored.

On the morning of July 9, 2014 Mr. Ross called our office to inform us that he received the Stop Work Order and would like to meet to determine what he needed to do in order to be in compliance with the FCLR. Mr. Ross met later that afternoon with the Planning Director and planning staff to discuss the particular situation. Staff informed Mr. Ross that we met with multiple state and federal agencies and determined that this was the Flathead County's

regulatory jurisdiction through the FCLR and that he would be required to apply for a Lakeshore Construction Permit to bring into compliance the completed work. Mr. Ross informed us that he would do whatever necessary to come into compliance and that if he had known ahead of time that he needed a permit he would have applied for one. It was explained to Mr. Ross that mass mechanized aquatic weed cutting in the lake and stockpiling in the LPZ was deemed to have a significant impact by the Planning Director and would require agency referrals and Planning Board recommendations before the application goes before the Commissioners for final decision. Mr. Ross stated that he understood that he would be required to apply for the lakeshore construction permit which would include all three of the properties he had already removed weeds from, and that any future work would require a permit and he would not be allowed to stockpile vegetation in the LPZ.

An application signed by all three property owners where work had been completed was received by our office from Mr. Ross on August 20, 2014. The site plan shows that the area mowed in the lake in front of the three properties was roughly 900 feet by 350 feet by 950 feet by 300 feet as shown in Figure 2. Mr. Ross explained in the application that the weeds are cut and picked up by the machine and states that, "This machine is basically a pontoon boat with a cutter like a hay swather." The machine cuts about 4.5 feet deep with a guard preventing it from gouging the lake bottom and the weeds are cut and picked by the machine to be unloaded onto shore or a trailer.

D. Agency Referrals

Referrals were sent to the following agencies on August 27, September 9, 2014 and October 3, 2014. Referrals were sent out to all of the following agencies and departments on August 27, it was communicated to us by Montana Fish, Wildlife and Parks that we had the wrong office so a new referral was sent to the correct office on September 9, and after a second meeting with the applicant in which additional materials were submitted, we submitted a second request on October 3 for an agency referral to the Flathead County Weed Control Department with the additional application material attached. The agencies that were sent requests for agency referrals are as follows:

- Montana Department of Environmental Quality
Reason: The mass cutting of vegetation within the waters of Little Bitterroot Lake may raise water quality concerns.
- Montana Fish, Wildlife & Parks
Reason: The mass cutting of vegetation within the waters of the lake may affect habitat for aquatic species within the lake, or recreation within the lake.
- U.S. Fish and Wildlife
Reason: The mass cutting of vegetation within the waters of the lake may affect habitat for aquatic species within the lake.
- U.S. Army Corps of Engineers
Reason: The mass cutting of vegetation with mechanized equipment within the water of the lake may have a negative impact on the lakebed.
- Confederated Salish and Kootenai Tribes
Reason: Little Bitterroot Lake is part of the watershed that drains through Salish and Kootenai tribal lands.
- DNRC Kalispell Water Resources Regional Office
Reason: The mass cutting of vegetation within the waters of Little Bitterroot Lake may impact water rights under DNRC jurisdiction.
- Christina Hollenbeck, Right-of-Way Specialist, DNRC – NW Land Office
Reason: Christina Hollenbeck requested she be contacted for lakeshore activities requiring agency referral.

- Flathead County Weed Control Department
Reason: The vegetation being cut from the waters of Little Bitterroot Lake was predominantly aquatic weeds within the borders of Flathead County.

III. COMMENTS RECEIVED

A. Agency Comments

The following is a summarized list of agency comment received as of the date of the completion of this staff report:

- Montana Fish, Wildlife & Parks
 - Comment: “It should be noted that the targeted plants are not legally defined as “noxious weeds,” but instead represent an important natural component of the aquatic system... We would expect the large-scale removal of aquatic plants to significantly alter fish and wildlife communities. The “weed” removal area (Figure 1) represents approximately 6 acres of habitat loss. This area could increase substantially if other landowners follow suit. The negative effects on fish and wildlife could be reduced by limiting plant removal to the immediate vicinity of docks and boat ramps, including a narrow route to open water. Montana Fish, Wildlife & Parks recommends minimizing the disturbance to natural aquatic vegetation to protect fish and wildlife habitat and the natural characteristics of Montana’s lakes. We recommend that Flathead County does not permit aquatic plant removal or mowing over large areas in the future. Sustaining public resources, including fish, wildlife, and the lakes themselves, require protection and conservation of all unique components of natural aquatic habitats.”
- Flathead County Weed Control Department
 - Comment: “Fish, Wildlife and Parks has direct control and responsibility for aquatic species management. However, due to the known infestation of Tansy Ragwort and other state declared noxious weeds in the area the Flathead County Weed District has the following concerns: Potential negative impacts mechanical removal and lake bed disturbance will have on native plant species, fish and other non-target organisms. Has the contractor completely identified all of the target and potential non-target species being affected? What’s the potential for an accelerated spread or infestation by plant fragmentation causing other land owners in the area to incur similar future costs? How will the contractor ensure an unwanted introduction of a new or exotic species? If the contractor intends to once again use County park property for access, a Park User Permit will be required. Due to the known terrestrial weed infestations in the area, the Flathead County Weeds District will draft a procedural protocol that will require the contractor’s acknowledgement and agreement prior to and after any further operations. The protocol will include a visual inspection of all equipment prior to water entry, and further measures to ensure control and containment of both aquatic and invasive terrestrial species in the area.”
- United States Fish and Wildlife
 - Comment: “My office does not address these types of issues.”
- DNRC Kalispell Water Resources Regional Office
 - Comment: “I have no comments regarding the subject lakeshore construction permit as it relates to either water right or floodplain programs administered by DNRC.”

IV. EVALUATION OF REQUEST:

The criteria set forth in the Flathead County Lake & Lakeshore Protection Regulations Section 4.1 Policy Criteria for Issuance of a Permit were used to determine findings of fact and to evaluate the significant impact lakeshore construction permit request as outlined below:

A. Materially diminish water quality.

The machine being used to cut the weeds in the lake collects the majority of vegetation being cut and while some vegetation escapes collection and washes up on shore there is a certain amount of aquatic vegetation which naturally washes onto the shoreline. The machine utilizes approved aquatic grade vegetable oil to lubricate the hydraulics that come in contact with the water and a spill containment kit utilizing floats and absorbent pads is on board to clean up mechanical fluids in the event of a spill or leak. The machine also utilizes a guard that prevents the cutting blades from coming in contact with the lake bottom which prevents rutting, gouging or excess siltation of the lake bottom. The applicant states that siltation is further prevented because, "Paddle wheel drive eliminates much of water movement below lake level."

One of the concerns raised in the Flathead County Weed Control Department's agency referral was the spread of weeds through the transport and operation of the mechanical weed removal watercraft. The Flathead County Weed Control Department raised concerns such as, "Has the contractor completely identified all of the target and potential non-target species that will be affected?", and, "What's the potential for an accelerated spread or infestation by plant fragmentation causing other land owners in the area to incur similar future costs?" The applicant addresses this issue by saying, "In the question of invasive species: Montana has a natural milfoil. To tell the difference between Eurasian and natural milfoil takes examination by experts in Missoula. In any case if milfoil is present it will reproduce from parts of the plant being transferred to another part of the waterway (or another body of water). Boat props chop the weeds far more than the harvester and pick up very little of the pieces. I work closely with Eric Hanson to identify areas of concern." The applicant further states, "Complete cleaning of the machine and all tables is done to meet and exceeds Fish and Game requirements for private boat use between water bodies."

It would appear that if milfoil were present in the area being mowed that both the operation of the weed harvester and boat props would create weed fragments that could spread and re-root elsewhere in the lake. The major difference between a boat prop and the mowing of weeds in this case would be the scale of the project. As seen in Figure 2. The weed harvester cut an area of weeds approximately 300 feet by 900 feet by 300 feet by 950 feet, which is a larger area than a boat prop would usually encounter. Mowing a path through the weeds around a property owners dock along with a corridor through the weeds to the open water, as suggested by Montana Fish, Wildlife & Parks, would minimize the area of disturbance to the vegetation by the mower, and clear an area to be used by boats which could prevent their boat props from creating additional weed fragments. Further regulatory precautions will also be required in future mechanized weed removal projects through following a procedural protocol currently being drafted by the Flathead County Weed District which will include things such as visual inspection of equipment and further measures to prevent contamination of both aquatic and terrestrial weeds.

Finding #1: It would appear that the machine itself and the procedures for operation of the machine would not materially diminish water quality because of the built in safeguards such as the use of vegetable oil for lubrication, the spill containment kit, the

blade guard on the bottom and the thorough cleaning and visual inspection being done by the operator in between water bodies; in future projects negative impacts to water quality could be further diminished by including a procedural protocol process by the Flathead County Weed Control Department aimed at identification of species and prevention of weed contamination.

Finding #2: The actual cutting of the aquatic weeds appears to have the potential to materially diminish water quality because of the possibility for weed fragments that escape pick up by the harvester to re-root elsewhere in the lake; however, the Montana Fish, Wildlife & Parks suggest that if the size of the harvested area is restricted the negative impacts can be reduced and mowing a navigable corridor from a dock to open water would prevent boat props from creating additional weed fragmentation.

B. Materially diminish habitat for fish or wildlife

The application claims, “Weeds are cut, not removed from lakebed (roots) they still allow cover for fish.” The applicant also states, “All harvested material is brought directly in front of the operator, any turtles, fish, or other living animals are removed and returned to the lake by hand or by reversing the machine. Fingerling fish are difficult to place all of them back due to their size” Because the applicant is not removing the vegetation permanently but instead cutting the vegetation down, the vegetation eventually grows back. However, comments from Montana Fish, Wildlife & Parks indicate that aquatic plants provide food, foraging habitat, and escape habitat for a number of aquatic species which are part of a food web for a larger community of animals including species of concern such as the bald eagles and common loons. The comments from Montana Fish and Wildlife have further indicated that clearing of aquatic vegetation on the scale seen on this project has the potential to damage these food webs if neighbors were to follow suit leading to mass clearing of aquatic vegetation, and a small scale clearing of high traffic areas around docks, boat ramps and narrow corridors out into open water would be more appropriate for preserving habitat for fish and wildlife.

Finding #3: It would appear, based on Montana Fish, Wildlife & Parks comment that the scale of this particular weed removal project representing approximately 6 acres of habitat would materially diminish habitat for fish or wildlife species because the scale is significant enough to affect escape, foraging and food habitat for a number of species vital to a larger food network involving species of concern; however, further comment from Montana Fish, Wildlife & Parks states that future projects harvesting weeds from a smaller area would be much less likely to have a negative impact on fish or wildlife habitat.

C. Interfere with navigation or other lawful recreation.

Mr. Ross has stated that cutting the weeds down in the lake helps open up navigable area on the water for boats to move more freely. Mr. Ross has also informed our office that many of his clients hire him to clear the aquatic weeds that grow in the shallow water in front of his clients’ homes in order to open up boat access from their docks to the deeper water in the middle of the lake. As for the operation of the machine the application indicates that the machines operation is, “No different than a boat that moves very slowly (idle-no wake).” He also claims he does not run the machine before 10 am.

Finding #4: It does not appear that the mass mechanized removal of aquatic weeds would interfere with navigation or other lawful recreation because the applicant is being hired by his individual clients to open up navigable areas of water for boats to

move more freely and the applicant does not run the machine until 10am and likens its operation to a very slow moving paddle boat which does not create a wake on the lake.

D. Create a public nuisance.

The mass mechanized cutting of aquatic vegetation within Little Bitterroot Lake has the potential to be a public nuisance because the activity is taking place on public waters and not private property; however the cutting of aquatic vegetation in public waters in front of private property is allowable without requiring a permit if done with hand tools. The operation of the machine may create a public nuisance due to the small amount of cut weeds that the machine fails to catch which is left floating in the water or may wash up onto shore. However, as comments from Montana Fish, Wildlife & Parks indicate that this activity undertaken on a smaller scale would affect a smaller area of weeds and therefore leave less weed fragmentation in the lake. The applicant states, “I do not start the machine until after 10:00 am and loading and unloading at ramps is faster than most people take with their boats. There are weeds that must be picked up that float away. I do this with the machine to the very best I can. There are far more weeds that wash on shore by natural frost and ice during the winter.” The applicant also says due to the machines thrust being generated from paddlewheels, there is no wake created.

Finding #5: The mass mechanized cutting of vegetation in the lake water has the potential to create a public nuisance as the activity is taking place on public waters and the operation of the machine may allow for slight amounts of cut weeds that the machine fails to catch to enter the waters and eventually the shores of the lake; however, the cutting of aquatic vegetation in the public waters of the lake is an activity which is allowed without a permit if the work is done by hand tools and there are weeds which naturally wash up on the shores of the lake and a smaller area of weed harvesting as recommended by the Montana Fish, Wildlife & Parks would create less weed fragmentation.

Finding #6: The operation of the machine itself would not appear to create a public nuisance because the applicant does not run the machine until 10 am, the process of unloading and loading the machine does not seem to take longer than a typical boat preventing congestion of public ramps and the machine does not create a wake because it utilizes paddlewheels to generate thrust.

E. Create a visual impact discordant with natural scenic values, as determined by the governing body, where such values form the predominant landscape elements.

The applicant states, “Action will improve scenic value by cutting weeds that are above and below water. If machine can cut a weed- Boat props are chopping and scattering them.” The potential for clearing of aquatic vegetation to improve or detract from scenic value is matter of opinion and does not directly address the potential for the activity to create a visual impact discordant with natural scenic values. The mass mechanized cutting of aquatic vegetation has the potential to create a visual impact discordant with natural scenic values if the vegetation is consistent with the character of the lake. Large swaths cut into the vegetation growing in shallow waters of Little Bitterroot Lake may detract from the natural scenic values of the lake if the predominate elements of the lake consist of that flora; however the removal of aquatic weeds in the waters of the lake if done by hand is an activity which is allowed without requiring a permit and the cut weeds are will eventually grow back to their natural state.

F. Alter the characteristic of the shoreline

According to the application, “Machine can’t go on shore. It can only unload weeds on trailer or shore depending on landowners wishes. Landowner removes weeds from their property.” The mass mechanized cutting and stock piling of aquatic vegetation has the potential to alter the characteristics of the shoreline on Little Bitterroot Lake if the area of shoreline being cut is characterized as an area with a high density of flora and if weeds are left stockpiled on the lakeshore. Stockpiling of vegetation within the LPZ is prohibited within the FCLR in Section 4.2(C)(b), therefore stockpiling of weeds within the LPZ would require a variance. The mass cutting of aquatic weeds in the shallow waters off of the shore would seem to almost always alter the characteristic of the shoreline, whether by hand, which is allowed without a permit, or by machine although the effects are temporary as the vegetation is left alive and will eventually return to its natural state.

Finding #7: The mass mechanized cutting of aquatic vegetation has the potential to create a visual impact discordant with natural scenic values and alter the characteristic of the shoreline because cutting the vegetation down in an area that’s primary natural elements consist of aquatic flora will remove the primary elements and temporarily alter the characteristic of the shoreline; however the removal of vegetation within the public waters is allowed without requiring a permit if done by hand and since the vegetation is left alive it will eventually grow back.

V. SUMMARY OF FINDINGS

1. It would appear that the machine itself and the procedures for operation of the machine would not materially diminish water quality because of the built in safeguards such as the use of vegetable oil for lubrication, the spill containment kit, the blade guard on the bottom and the thorough cleaning and visual inspection being done by the operator in between water bodies; in future projects negative impacts to water quality could be further diminished by including a procedural protocol process by the Flathead County Weed Control Department aimed at identification of species and prevention of weed contamination.
2. The actual cutting of the aquatic weeds appears to have the potential to materially diminish water quality because of the possibility for weed fragments that escape pick up by the harvester to re-root elsewhere in the lake; however, the Montana Fish, Wildlife & Parks suggest that if the size of the harvested area is restricted the negative impacts can be reduced and mowing a navigable corridor from a dock to open water would prevent boat props from creating additional weed fragmentation.
3. It would appear, based on Montana Fish, Wildlife & Parks comment that the scale of this particular weed removal project representing approximately 6 acres of habitat would materially diminish habitat for fish or wildlife species because the scale is significant enough to affect escape, foraging and food habitat for a number of species vital to a larger food network involving species of concern; however, further comment from Montana Fish, Wildlife & Parks states that future projects harvesting weeds from a smaller area would be much less likely to have a negative impact on fish or wildlife habitat.
4. It does not appear that the mass mechanized removal of aquatic weeds would interfere with navigation or other lawful recreation because the applicant is being hired by his individual clients to open up navigable areas of water for boats to move more freely and the applicant does not run the machine until 10am and likens its operation to a very slow moving paddle boat which does not create a wake on the lake.
5. The mass mechanized cutting of vegetation in the lake water has the potential to create a public nuisance as the activity is taking place on public waters and the operation of the

machine may allow for slight amounts of cut weeds that the machine fails to catch to enter the waters and eventually the shores of the lake; however, the cutting of aquatic vegetation in the public waters of the lake is an activity which is allowed without a permit if the work is done by hand tools and there are weeds which naturally wash up on the shores of the lake and a smaller area of weed harvesting as recommended by the Montana Fish, Wildlife & Parks would create less weed fragmentation.

6. The operation of the machine itself would not appear to create a public nuisance because the applicant does not run the machine until 10 am, the process of unloading and loading the machine does not seem to take longer than a typical boat preventing congestion of public ramps and the machine does not create a wake because it utilizes paddlewheels to generate thrust.
7. The mass mechanized cutting of aquatic vegetation has the potential to create a visual impact discordant with natural scenic values and alter the characteristic of the shoreline because cutting the vegetation down in an area that's primary natural elements consist of aquatic flora will remove the primary elements and temporarily alter the characteristic of the shoreline; however the removal of vegetation within the public waters is allowed without requiring a permit if done by hand and since the vegetation is left alive it will eventually grow back.

CONCLUSION:

Per Section 3.3 and 4.1 of the Flathead County Lake and Lakeshore Protection Regulations a review and evaluation by staff comparing the requested application for a lakeshore construction permit for the mass mechanized cutting of approximately 6 acres of aquatic vegetation within the waters of, and stockpiling weeds on the shore of Little Bitterroot Lake to the general criteria for issuance of a permit has found the proposal does not comply with all of the review criteria, based upon the draft Findings of Fact presented above. It does not appear that the activity in question meets the majority of the policy criteria for issuance of a permit.

Planner: LM